

### Abstract of the Disclosure

There is provided a combined TV and FM radio receiver for selectively receiving TV and FM radio signals via a single tuner using a digital intermediate frequency (IF) stage. The receiver includes a tuner that selects TV band or FM radio band signals and converts the selected signals into IF signals or primary sound IF signals; an IF processor that generates local oscillating signals depending on whether a current mode is a TV mode or an FM radio mode, and converts the IF signals and/or primary sound IF signals, into baseband signals and secondary sound IF signals, respectively; a video demodulator that extracts video signals; an audio demodulator that extracts TV audio signals and FM radio signals according to TV sound or FM radio mode data; and a controller that controls the tuner, and the IF processor, and applies the TV sound or FM radio mode data to the audio demodulator.